

**SVKM's**  
**D. J. Sanghvi College of Engineering**

**Program: B.Tech in Production  
Engineering**

**Academic Year: 2022**

**Duration: 3 hours**

**Date: 13.01.2023**

**Time: 10:30 am to 01:30 pm**

**Subject: Engineering Economics Finance Costing and Accounting  
(Semester VII)**

**Marks: 75**

**Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover page of the Answer Book, which is provided for their use.**

- (1)** This question paper contains three pages.
- (2) All Questions are Compulsory.**
- (3)** All questions carry equal marks.
- (4) Answer to each new question is to be started on a fresh page.**
- (5) Figures in the brackets on the right indicate full marks.**
- (6) Assume suitable data wherever required, but justify it.**
- (7) Draw the neat labelled diagrams, wherever necessary.**

<b>Question No.</b>	<b>Attempt all questions.</b>	<b>Max. Marks</b>
Q.1.	Attempt any three  a) Explain Production Possibility Curve with an example. b) Explain features of Capitalist Economy c) How Adam Smith has defined Economics? d) Explain four basic economic problem as a central economic problem.	15
Q.2.	Write short note on any three  a) Law of Supply b) Elasticity of Supply c) Oligopolistic Competition form of market structure d) Law of Diminishing Marginal Utility e) Exceptions to the Law of Demand	15
Q.3.	Write short note on any three  a) Income method of measuring National Income b) Gross Domestic Product c) Measures to check Inflation	15

	d) Functions of Central Bank e) Qualitative selective measures to regulate credit policy																																																																									
Q.4.	a) Explain the golden rules of accounting with an example. b) How financial performance are analyzed? c) From the following particulars prepare Balance sheet as on 31 <sup>st</sup> March 2021 <table><tr><td>Capital</td><td>₹</td><td>550,000.00</td></tr><tr><td>Drawing</td><td>₹</td><td>15,000.00</td></tr><tr><td>Sundry Debtors</td><td>₹</td><td>175,000.00</td></tr><tr><td>Sundry Creditors</td><td>₹</td><td>90,000.00</td></tr><tr><td>Loan from Bank</td><td>₹</td><td>30,000.00</td></tr><tr><td>Net Profit</td><td>₹</td><td>200,000.00</td></tr><tr><td>Closing Stock</td><td>₹</td><td>60,000.00</td></tr><tr><td>Plant &amp; Machinery</td><td>₹</td><td>150,000.00</td></tr><tr><td>Building</td><td>₹</td><td>130,000.00</td></tr><tr><td>Land</td><td>₹</td><td>250,000.00</td></tr><tr><td>Goodwill</td><td>₹</td><td>50,000.00</td></tr><tr><td>Furniture</td><td>₹</td><td>40,000.00</td></tr></table> <p style="text-align: center;"><b>OR</b></p> <p>From the following particulars prepare P&amp;L Account for the year ended 31<sup>st</sup> March 2021</p> <table><tr><td>Gross Profit</td><td>₹</td><td>350,000.00</td></tr><tr><td>Commission Received</td><td>₹</td><td>40,000.00</td></tr><tr><td>Rent Received</td><td>₹</td><td>20,000.00</td></tr><tr><td>Discount Received</td><td>₹</td><td>25,000.00</td></tr><tr><td>Dividend Received</td><td>₹</td><td>25,000.00</td></tr><tr><td>Administration Expenses</td><td>₹</td><td>35,000.00</td></tr><tr><td>Selling Expenses</td><td>₹</td><td>25,000.00</td></tr><tr><td>Distribution Expenses</td><td>₹</td><td>38,000.00</td></tr><tr><td>Office Expenses</td><td>₹</td><td>42,000.00</td></tr><tr><td>Trade Expenses</td><td>₹</td><td>50,000.00</td></tr><tr><td>General Expenses</td><td>₹</td><td>65,000.00</td></tr><tr><td>Carriage outwards</td><td>₹</td><td>65,000.00</td></tr></table>	Capital	₹	550,000.00	Drawing	₹	15,000.00	Sundry Debtors	₹	175,000.00	Sundry Creditors	₹	90,000.00	Loan from Bank	₹	30,000.00	Net Profit	₹	200,000.00	Closing Stock	₹	60,000.00	Plant & Machinery	₹	150,000.00	Building	₹	130,000.00	Land	₹	250,000.00	Goodwill	₹	50,000.00	Furniture	₹	40,000.00	Gross Profit	₹	350,000.00	Commission Received	₹	40,000.00	Rent Received	₹	20,000.00	Discount Received	₹	25,000.00	Dividend Received	₹	25,000.00	Administration Expenses	₹	35,000.00	Selling Expenses	₹	25,000.00	Distribution Expenses	₹	38,000.00	Office Expenses	₹	42,000.00	Trade Expenses	₹	50,000.00	General Expenses	₹	65,000.00	Carriage outwards	₹	65,000.00	4 4 7
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Q.5.	Attempt any two a) Pepsi Company produces a single article. Following cost data is given about its product:-  Selling price per unit Rs.40	15																																																																								

Marginal cost per unit Rs.24

Fixed cost per annum Rs. 16000

Calculate:

- (i) Profit at sales of Rs. 60,000
- (ii) New break even sales, if price is reduced by 10%.

b) ✗ Following information has been collected from the books of PQ Ltd.

Cost of material	40,000
Direct Labour	70,000
Factory overhead	70,000
Office and administrative overhead	30,000
Selling and distribution overhead	40,000
Sales	2,40,000

Prepare cost sheet with given details.

Determine

- (1) % of factory Overhead to direct labor
- (2) % office cost to factory cost
- (3) % selling on cost to factory cost
- (4) % Profit on Sales

c) ✗ For making 10 kg. of yarn, the standard material requirement is:

Material	Quantity (kg.)	Rate per kg. (Rs.)
White	8	6.00
Black	4	4.00

In March, 1,000 kg. of yarn was produced. The actual consumption of materials is as under:

Material	Quantity (kg.)	Rate per kg. (Rs.)
White	750	7.00
Black	500	5.00

Calculate: (1) MCV (2) MPV (3) MUV

d) ✗ Prepare "Process A" account with given information

Total 850 units are produced and transferred to next process from

Process A account

Following informations are given for a process

Material introduced	1000 units @ 10 percent unit
labor cost	₹ 2000
Indirect expenses.	₹ 1000
Direct expenses	₹ 2000
Normal loss	10% of input sold @ ₹ 2/ unit